

What is claimed is:

1. A crystalline form of nateglinide (Form C) in the solid state having an XRPD pattern with peaks at 5.2, 8.2 and  $8.8 \pm 0.2$  degrees  $2\theta$ .
2. The crystalline form of claim 1, wherein the crystalline form has an XRPD pattern as substantially depicted in Figure 2.
3. A process for preparing the crystalline nateglinide of claim 1 comprising the steps of:
  - a) triturating a crystalline form of nateglinide in dimethylacetamide to obtain the crystalline form of claim 1; and
  - b) recovering the crystalline form of claim 1.
4. A process for preparing the crystalline nateglinide of claim 1 comprising the steps of:
  - a) preparing a solution of nateglinide in dimethylacetamide;
  - b) crystallizing the crystalline form from the solution; and
  - c) recovering the crystalline form.
5. A crystalline form of nateglinide (Form J) in the solid state characterized by data selected from the group consisting of: an XRPD pattern with peaks at 8.0, 11.2, 12.0, 15.9, 16.1, 17.7 and  $28.1 \pm 0.2$  degrees  $2\theta$ ; and a DSC thermogram with endotherms at about 49, 105 and 168 °C.
6. The crystalline form of claim 5, wherein the crystalline form is characterized by an XRPD pattern with peaks at 8.0, 11.2, 12.0, 15.9, 16.1, 17.7 and  $28.1 \pm 0.2$  degrees  $2\theta$ .
7. The crystalline form of claim 6, wherein the crystalline form has an XRPD pattern as substantially depicted in Figure 8.
8. A process for preparing the crystalline form of claim 5 comprising the steps of:
  - a) preparing a solution of nateglinide in N-methyl pyrrolidone;
  - b) crystallizing the crystalline form from the solution; and
  - c) recovering the crystalline form.
9. A process for preparing the crystalline form of claim 5 comprising the steps of:
  - a) triturating a crystalline form of nateglinide in N-methyl pyrrolidone to obtain the crystalline form of claim 5; and
  - b) recovering the crystalline form of claim 5.
10. A crystalline form of nateglinide (Form K) in the solid state characterized by data selected from the group consisting of: an XRPD pattern with peaks at 9.5, 15.4, 17.1 and

$21.2 \pm 0.2$  degrees  $\theta$ ; and a DSC thermogram with endotherms at about 79, 105, 145 and 170 °C.

11. The crystalline form of nateglinide of claim 10, having an XRPD pattern with peaks at 9.5, 15.4, 17.1 and  $21.2 \pm 0.2$  degrees  $\theta$ .
12. The crystalline form of claim 11, wherein the crystalline form has an XRPD pattern as substantially depicted in Figure 9.
13. A process for preparing the crystalline form of claim 10 comprising the steps of:
  - a) preparing a solution of nateglinide in DMF;
  - b) crystallizing the crystalline form from the solution; and
  - c) recovering the crystalline form.
14. A process for preparing the crystalline form of claim 10 comprising the steps of:
  - a) triturating a crystalline form of nateglinide in DMF to obtain the crystalline form of claim 10; and
  - b) recovering the crystalline form.
15. A crystalline form of nateglinide (Form V) characterized by data selected from the group consisting of: an XRPD pattern with peaks at 4.5, 5.8, 11.4 and  $16.4 \pm 0.2$  degrees  $\theta$  and a DSC thermogram with endotherms at about 81 and 139°C.
16. The crystalline nateglinide of claim 15, wherein the crystalline form is characterized by an XRPD pattern with peaks at 4.5, 5.8, 11.4 and  $16.4 \pm 0.2$  degrees  $\theta$ .
17. The crystalline form of claim 16, wherein the crystalline form has an XRPD pattern as substantially depicted in Figure 18.
18. A process for preparing the crystalline form of claim 15 comprising the steps of:
  - a) preparing a solution of nateglinide in dimethylethane;
  - b) crystallizing the crystalline form from the solution; and
  - c) recovering the crystalline form.
19. A process for preparing the crystalline form of claim 15 comprising the steps of:
  - a) triturating a crystalline form of nateglinide in dimethoxy ethane to obtain the crystalline form of claim 15, with the proviso that the nateglinide triturated is not Form U; and
  - b) recovering the crystalline form of claim 15.
20. The process of claim 19, wherein the nateglinide triturated is Form H.

21. A crystalline form of nateglinide in solid state (Form  $\beta$ ) characterized by data selected from the group consisting of: an XRPD pattern with peaks at 4.6, 9.4, 13.9 and  $18.8 \pm 0.2$  degrees  $2\theta$ ; and a DSC thermogram with endotherms at about 91 and 100°C.
22. The crystalline form of nateglinide of claim 21, wherein the nateglinide has an XRPD pattern with peaks at 4.6, 9.4, 13.9 and  $18.8 \pm 0.2$  degrees  $2\theta$ .
23. The crystalline form of claim 22, wherein the crystalline form has an XRPD pattern as substantially depicted in Figure 22.
24. A process for preparing the crystalline form of claim 21 comprising the step of heating crystalline nateglinide Form J.
25. A process for preparing crystalline form of claim 21 comprising the step of heating a solid obtained from trituration of nateglinide Form H in N-methyl pyrrolidone.
26. A crystalline form of nateglinide (Form  $\gamma$ ) characterized by data selected from the group consisting of: an XRPD pattern with peaks at 4.4, 8.9, 18.4, 18.8 and  $19.5 \pm 0.2$  degrees  $2\theta$ ; and a DSC thermogram with endotherms at about 93 and 136°C.
27. The crystalline form of claim 26, wherein the crystalline form has an XRPD pattern with peaks at 4.4, 8.9, 18.4, 18.8 and  $19.5 \pm 0.2$  degrees  $2\theta$ .
28. The crystalline form of claim 27, wherein the crystalline form has an XRPD pattern as substantially depicted in figure 23.
29. A process for preparing the crystalline form of claim 26, comprising the step of heating a solid obtained from trituration of a crystalline form of nateglinide in N-methyl pyrrolidone, with the proviso that the nateglinide triturated is not Form H.
30. The process of claim 29, wherein the crystalline form of nateglinide triturated is nateglinide Form U.
31. A crystalline form of nateglinide (Form  $\epsilon$ ) characterized by data selected from the group consisting of: an XRPD pattern with peaks at 4.2, 13.0, 13.6, 14.3, 16.2, 16.7 and  $19.6 \pm 0.2$  degrees  $2\theta$ ; and a DSC thermogram with endotherms at about 64, 108 and 129°C.
32. The crystalline form of claim 31, wherein the crystalline form is characterized with peaks at 4.2, 13.0, 13.6, 14.3, 16.2, 16.7 and  $19.6 \pm 0.2$  degrees  $2\theta$ .
33. The crystalline form of claim 32, wherein the crystalline form has an XRPD pattern as substantially depicted in Figure 25.
34. A process for preparing the crystalline form of claim 31 comprising the steps of:

- a) preparing a solution of nateglinide in a solvent selected from the group consisting of acetone, acetonitrile and nitromethane;
- b) crystallizing the crystalline form from the solution; and
- c) recovering the crystalline form.

35. The process of claim 34, wherein the solvent is acetone.

36. The process of claim 34, wherein the solvent is acetonitrile.

37. The process of claim 34, wherein the solvent is nitromethane.

38. A process for preparing the crystalline form of claim 31 comprising the steps of:

- a) triturating a crystalline form of nateglinide in nitromethane to obtain the crystalline form of claim 31, with the proviso that the crystalline form triturated is not Form U; and
- b) recovering the crystalline form of claim 31.

39. The process of claim 38, wherein the crystalline form triturated is Form H.

40. A crystalline form of nateglinide, wherein the crystalline form is a dimethyl acetamide solvate.

41. The crystalline form of claim 40, wherein the crystalline form is nateglinide Form C.

42. A crystalline form of nateglinide, wherein the crystalline form is an N-methylpyrrolidone solvate.

43. The crystalline form of claim 42, wherein the crystalline form is nateglinide Form J.

44. A crystalline form of nateglinide, wherein the crystalline form is a dimethyl formamide solvate.

45. The crystalline form of claim 44, wherein the crystalline form is nateglinide Form K.

46. A crystalline form of nateglinide, wherein the crystalline form is a dimethoxy ethane solvate.

47. The crystalline form of claim 46, wherein the crystalline form is nateglinide Form V.

48. A crystalline form of nateglinide, wherein the crystalline form is an N-methyl pyrrolidone solvate.

49. The crystalline form of claim 48, wherein the crystalline form is nateglinide Form gamma.

50. The crystalline form of claim 48, wherein the crystalline form is nateglinide Form beta.

51. A crystalline form of nateglinide, wherein the crystalline form is a solvate of a solvent selected from the group consisting of acetone, acetonitrile and nitromethane.

52. The crystalline form of claim 51, wherein the solvent is acetone or nitromethane.
53. The crystalline form of claim 51, wherein the crystalline form is nateglinide Form epsilon.
54. A pharmaceutical formulation comprising a crystalline form of nateglinide selected from the group consisting of Form C, J, K , V, beta, gamma, epsilon, and a pharmaceutically acceptable excipient.
55. A method for lowering blood sugar level in a mammal comprising the step of administering the pharmaceutical formulation of claim 54 to the mammal.